```
============================================================
```
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=11; day=9; hr=10; min=3; sec=7; ms=738;]
```
============================================================
```

Validated By CRFValidator v 1.0.3

Application No: 10540539   Version No: 2.0

Input Set:

Output Set:

Started: 2010-11-09 07:49:39.400
Finished: 2010-11-09 07:49:40.892
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 492 ms
Total Warnings: 7
Total Errors: 0
No. of SeqIDs Defined: 15
Actual SeqID Count: 15

Error code   Error Description

W 213   Artificial or Unknown found in <213> in SEQ ID (9)

W 213   Artificial or Unknown found in <213> in SEQ ID (10)

W 213   Artificial or Unknown found in <213> in SEQ ID (11)

W 213   Artificial or Unknown found in <213> in SEQ ID (12)

W 213   Artificial or Unknown found in <213> in SEQ ID (13)

W 213   Artificial or Unknown found in <213> in SEQ ID (14)

W 213   Artificial or Unknown found in <213> in SEQ ID (15)

<110>   ZHOU, Rouli
        SHAO, Genze
        LIU, Xinrong
        ZHANG, Qingyun
        RUI, Jingan
        ZHANG, Ye
        JIN, Yueying
        LIN, Ming
        ZHANG, Sha

<120>   Human Cancer-Relating Genes, the Products Encoded Thereby and
        Application Thereof

<130>   062331-2002

<140>   10540539
<141>   2006-10-04

<150>   PCT/CN2003/001109
<151>   2003-12-24

<150>   CN 03109786.3
<151>   2003-04-21

<150>   CN 02158110.X
<151>   2002-12-24

<160>   15

<170>   PatentIn version 3.4

<210>   1
<211>   954
<212>   DNA
<213>   Homo sapiens

<400>   1
atgacgtcac ggactcgggt cacatggccg agtccgcccc gccccctccc cgtccccgcc   60

gctgcagccg tcgccttcgg agcgaagggt accgacccgg cagaagctcg gagctctcgg   120

ggtatcgagg aggcaggccc gcgggcgcac gggcgagcgg ccgggagcc ggagcggcgg   180

aggagccggc agcagcggcg cggcgggctc caggcgaggc ggtcgacgct cctgaaaact   240

tgcgcgcgcg ctcgcgccac tgcgcccgga gcgatgaaga tggtcgcgcc ctggacgcgg   300

ttctactcca acagctgctg cttgtgctgc catgtccgca ccggcaccat cctgctcggc   360

gtctggtatc tgatcatcaa tgctgtggta ctgttgattt tattgagtgc cctggctgat   420

ccggatcagt ataacttttc aagttctgaa ctgggaggtg actttgagtt catggatgat   480

gccaacatgt gcattgccat tgcgatttct cttctcatga tcctgatatg tgctatggct   540

```
acttacggag cgtacaagca acgcgcagcc tggatcatcc cattcttctg ttaccagatc        600

tttgactttg ccctgaacat gttggttgca atcactgtgc ttatttatcc aaactccatt        660

caggaataca tacggcaact gcctcctaat tttccctaca gagatgatgt catgtcagtg        720

aatcctacct gtttggtcct tattattctt ctgtttatta gcattatctt gacttttaag        780

ggttacttga ttagctgtgt ttggaactgc taccgataca tcaatggtag gaactcctct        840

gatgtcctgg tttatgttac cagcaatgac actacggtgc tgctaccccc gtatgatgat        900

gccactgtga atggtgctgc caaggagcca ccgccacctt acgtgtctgc ctaa              954


<210>   2
<211>   1440
<212>   DNA
<213>   Homo sapiens

<400>   2
gccgactagg ggactggcgg agggtgcacg ctgatggatt tactcaccgg gtgcttggag         60

ctccagcagc tggctggagc ccgcgatgac gtcacggact cgggtcacat ggccgagtcc        120

gccccgcccc ctccccgtcc ccgccgctgc agccgtcgcc ttcggagcga agggtaccga        180

cccggcagaa gctcggagct ctcggggtat cgaggaggca ggcccgcggg cgcacgggcg        240

agcgggccgg gagccggagc ggcggaggag ccggcagcag cggcgcggcg ggctccaggc        300

gaggcggtcg acgctcctga aaacttgcgc gcgcgctcgc gccactgcgc ccggagcgat        360

gaagatggtc gcgccctgga cgcggttcta ctccaacagc tgctgcttgt gctgccatgt        420

ccgcaccggc accatcctgc tcggcgtctg gtatctgatc atcaatgctg tggtactgtt        480

gattttattg agtgccctgg ctgatccgga tcagtataac ttttcaagtt ctgaactggg        540

aggtgacttt gagttcatgg atgatgccaa catgtgcatt gccattgcga tttctcttct        600

catgatcctg atatgtgcta tggctactta cggagcgtac aagcaacgcg cagcctggat        660

catcccattc ttctgttacc agatctttga ctttgccctg aacatgttgg ttgcaatcac        720

tgtgcttatt tatccaaact ccattcagga atacatacgg caactgcctc ctaattttcc        780

ctacagagat gatgtcatgt cagtgaatcc tacctgtttg gtccttatta ttcttctgtt        840

tattagcatt atcttgactt ttaagggtta cttgattagc tgtgtttgga actgctaccg        900

atacatcaat ggtaggaact cctctgatgt cctggtttat gttaccagca atgacactac        960

ggtgctgcta ccccgtatg atgatgccac tgtgaatggt gctgccaagg agccaccgcc        1020

accttacgtg tctgcctaag ccttcaagtg ggcggagctg agggcagcag cttgactttg        1080
```

```
cagacatctg agcaatagtt ctgttatttc acttttgcca tgagcctctc tgagcttgtt      1140

tgttgctgaa atgctacttt ttaaaattta gatgttagat tgaaaactgt agttttcaac      1200

atatgctttg ctggaacact gtgatagatt aactgtagaa ttcttcctgt acgattgggg      1260

atataatggg cttcactaac cttccctagg cattgaaact tcccccaaat ctgatggacc      1320

tagaagtctg cttttgtacc tgctgggccc caaagttggg cattttttctc tctgttccct      1380

ctcttttgaa aatgtaaaat aaaaccaaaa atagaccaaa aaaaaaaaaa aaaaaaaaa      1440


<210>  3
<211>  2169
<212>  DNA
<213>  Homo sapiens

<400>  3
gccgactagg ggactggcgg agggtgcacg ctgatggatt tactcaccgg gtgcttggag        60

ctccagcagc tggctggagc ccgcgatgac gtcacggact cgggtcacat ggccgagtcc       120

gccccgcccc ctccccgtcc ccgccgctgc agccgtcgcc ttcggagcga agggtaccga       180

cccggcagaa gctcggagct ctcggggtat cgaggaggca ggcccgcggg cgcacgggcg       240

agcgggccgg gagccggagc ggcggaggag ccggcagcag cggcgcggcg ggctccaggc       300

gaggcggtcg acgctcctga aaacttgcgc gcgcgctcgc gccactgcgc ccggagcgat       360

gaagatggtc gcgccctgga cgcggttcta ctccaacagc tgctgcttgt gctgccatgt       420

ccgcaccggc accatcctgc tcggcgtctg gtatctgatc atcaatgctg tggtactgtt       480

gattttattg agtgccctgg ctgatccgga tcagtataac ttttcaagtt ctgaactggg       540

aggtgacttt gagttcatgg atgatgccaa catgtgcatt gccattgcga tttctcttct       600

catgatcctg atatgtgcta tggctactta cggagcgtac aagcaacgcg cagcctggat       660

catcccattc ttctgttacc agatctttga ctttgccctg aacatgttgg ttgcaatcac       720

tgtgcttatt tatccaaact ccattcagga atacatacgg caactgcctc ctaattttcc       780

ctacagagat gatgtcatgt cagtgaatcc tacctgtttg gtccttatta ttcttctgtt       840

tattagcatt atcttgactt ttaagggtta cttgattagc tgtgtttgga actgctaccg       900

atacatcaat ggtaggaact cctctgatgt cctggtttat gttaccagca atgacactac       960

ggtgctgcta cccccgtatg atgatgccac tgtgaatggt gctgccaagg agccaccgcc      1020

accttacgtg tctgcctaag ccttcaagtg ggcggagctg agggcagcag cttgactttg      1080

cagacatctg agcaatagtt ctgttatttc acttttgcca tgagcctctc tgagcttgtt      1140
```

```
tgttgctgaa atgctacttt ttaaaattta gatgttagat tgaaaactgt agttttcaac      1200

atatgctttg ctggaacact gtgatagatt aactgtagaa ttcttcctgt acgattgggg      1260

atataatggg cttcactaac cttccctagg cattgaaact tcccccaaat ctgatggacc      1320

tagaagtctg cttttgtacc tgctgggccc caaagttggg cattttctc tctgttccct       1380

ctcttttgaa aatgtaaaat aaaaccaaaa atagacaact ttttcttcag ccattccagc      1440

atagagaaca aaaccttatg gaaacaggaa tgtcaattgt gtaatcattg ttctaattag      1500

gtaaatagaa gtccttatgt atgtgttaca agaatttccc ccacaacatc ctttatgact      1560

gaagttcaat gacagtttgt gtttggtggt aaaggatttt ctccatggcc tgaattaaga      1620

ccattagaaa gcaccaggcc gtgggagcag tgaccatctg ctgactgttc ttgtggatct      1680

tgtgtccagg gacatggggt gacatgcctc gtatgtgtta gagggtggaa tggatgtgtt      1740

tggcgctgca tgggatctgg tgccctctt ctcctggatt cacatcccca cccagggccc       1800

gcttttacta agtgttctgc cctagattgg ttcaaggagg tcatccaact gactttatcg      1860

agtggaattg ggatatattt gatatacttc tgcctaacaa catggaaaag ggttttcttt      1920

tccctgcaag ctacatccta ctgctttgaa cttccaagta tgtctagtca ccttttaaaa      1980

tgtaaacatt ttcagaaaaa tgaggattgc cttccttgta tgcgcttttt accttgacta      2040

cctgaattgc aagggatttt tatatattca tatgttacaa agtcagcaac tctcctgttg      2100

gttcattatt gaatgtgctg taaattaagt tgtttgcaat taaaacaagg tttgcccaca      2160

aaaaaaaaa                                                              2169


<210>   4
<211>   317
<212>   PRT
<213>   Homo sapiens

<400>   4

Met Thr Ser Arg Thr Arg Val Thr Trp Pro Ser Pro Pro Arg Pro Leu
1               5                   10                  15


Pro Val Pro Ala Ala Ala Ala Val Ala Phe Gly Ala Lys Gly Thr Asp
            20                  25                  30


Pro Ala Glu Ala Arg Ser Ser Arg Gly Ile Glu Glu Ala Gly Pro Arg
        35                  40                  45
```

Ala His Gly Arg Ala Gly Arg Glu Pro Glu Arg Arg Arg Ser Arg Gln
    50   55   60

Gln Arg Arg Gly Gly Leu Gln Ala Arg Arg Ser Thr Leu Leu Lys Thr
65   70   75   80

Cys Ala Arg Ala Arg Ala Thr Ala Pro Gly Ala Met Lys Met Val Ala
                85   90   95

Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys Leu Cys Cys His Val
            100   105   110

Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr Leu Ile Ile Asn Ala
        115   120   125

Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala Asp Pro Asp Gln Tyr
    130   135   140

Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe Glu Phe Met Asp Asp
145   150   155   160

Ala Asn Met Cys Ile Ala Ile Ala Ile Ser Leu Leu Met Ile Leu Ile
            165   170   175

Cys Ala Met Ala Thr Tyr Gly Ala Tyr Lys Gln Arg Ala Ala Trp Ile
            180   185   190

Ile Pro Phe Phe Cys Tyr Gln Ile Phe Asp Phe Ala Leu Asn Met Leu
        195   200   205

Val Ala Ile Thr Val Leu Ile Tyr Pro Asn Ser Ile Gln Glu Tyr Ile
    210   215   220

Arg Gln Leu Pro Pro Asn Phe Pro Tyr Arg Asp Asp Val Met Ser Val
225   230   235   240

Asn Pro Thr Cys Leu Val Leu Ile Ile Leu Leu Phe Ile Ser Ile Ile
            245   250   255

Leu Thr Phe Lys Gly Tyr Leu Ile Ser Cys Val Trp Asn Cys Tyr Arg
            260   265   270

Tyr Ile Asn Gly Arg Asn Ser Ser Asp Val Leu Val Tyr Val Thr Ser

Asn Asp Thr Thr Val Leu Leu Pro Pro Tyr Asp Asp Ala Thr Val Asn
    290   295   300

Gly Ala Ala Lys Glu Pro Pro Pro Tyr Val Ser Ala
305   310   315

<210> 5
<211> 226
<212> PRT
<213> Homo sapiens

<400> 5

Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys
1   5   10   15

Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr
                20   25   30

Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala
             35   40   45

Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe
          50   55   60

Glu Phe Met Asp Asp Ala Asn Met Cys Ile Ala Ile Ala Ile Ser Leu
65   70   75   80

Leu Met Ile Leu Ile Cys Ala Met Ala Thr Tyr Gly Ala Tyr Lys Gln
                85   90   95

Arg Ala Ala Trp Ile Ile Pro Phe Phe Cys Tyr Gln Ile Phe Asp Phe
                100   105   110

Ala Leu Asn Met Leu Val Ala Ile Thr Val Leu Ile Tyr Pro Asn Ser
          115   120   125

Ile Gln Glu Tyr Ile Arg Gln Leu Pro Pro Asn Phe Pro Tyr Arg Asp
          130   135   140

Asp Val Met Ser Val Asn Pro Thr Cys Leu Val Leu Ile Ile Leu Leu
145   150   155   160

Phe Ile Ser Ile Ile Leu Thr Phe Lys Gly Tyr Leu Ile Ser Cys Val
                165   170   175

Trp Asn Cys Tyr Arg Tyr Ile Asn Gly Arg Asn Ser Ser Asp Val Leu
                180   185   190

Val Tyr Val Thr Ser Asn Asp Thr Thr Val Leu Leu Pro Pro Tyr Asp
            195   200   205

Asp Ala Thr Val Asn Gly Ala Ala Lys Glu Pro Pro Pro Pro Tyr Val
        210   215   220

Ser Ala
225

<210>   6
<211>   2264
<212>   DNA
<213>   Homo sapiens

<400>   6
gaatctcgac cccttgaatgg agttacacga acggccagat gaaagaagga aggcccggac   60

ctccactcag ggccgactag gggactggcg gagggtgcac gctgatggat ttactcaccg   120

ggtgcttgga gctccagcag ctgcttggag ctccagcagc tggctggagc ccgcgatgac   180

gtcacggact cgggtcacat ggccgagtcc gccccgcccc ctccccgtcc ccgccgctgc   240

agccgtcgcc ttcggagcga agggtaccga cccggcagaa gctcggagct ctcggggtat   300

cgaggaggca ggcccgcggg cgcacgggcg agcgggccgg gagccggagc ggcggaggag   360

ccggcagcag cggcgcggcg ggctccaggc gaggcggtcg acgctcctga aaacttgcgc   420

gcgcgctcgc gccactgcgc ccggagcgat gaagatggtc gcgccctgga cgcggttcta   480

ctccaacagc tgctgcttgt gctgccatgt ccgcaccggc accatcctgc tcggcgtctg   540

gtatctgatc atcaatgctg tggtactgtt gatttttattg agtgccctgg ctgatccgga   600

tcagtataac ttttcaagtt ctgaactggg aggtgacttt gagttcatgg atgatgccaa   660

catgtgcatt gccattgcga tttctcttct catgatcctg atatgtgcta tggctactta   720

cggagcgtac aagcaacgcg cagcctggat catcccattc ttctgttacc agatctttga   780

ctttgccctg aacatgttgg ttgcaatcac tgtgcttatt tatccaaact ccattcagga   840

atacatacgg caactgcctc ctaatttttcc ctacagagat gatgtcatgt cagtgaatcc   900

```
tacctgtttg gtccttatta ttcttctgtt tattagcatt atcttgactt ttaagggtta      960

cttgattagc tgtgtttgga actgctaccg atacatcaat ggtaggaact cctctgatgt     1020

cctggtttat gttaccagca atgacactac ggtgctgcta cccccgtatg atgatgccac     1080

tgtgaatggt gctgccaagg agccaccgcc accttacgtg tctgcctaag ccttcaagtg     1140

ggcggagctg agggcagcag cttgactttg cagacatctg agcaatagtt ctgttatttc     1200

acttttgcca tgagcctctc tgagcttgtt tgttgctgaa atgctacttt ttaaaattta     1260

gatgttagat tgaaaactgt agttttcaac atatgctttg ctggaacact gtgatagatt     1320

aactgtagaa ttcttcctgt acgattgggg atataatggg cttcactaac cttccctagg     1380

cattgaaact tcccccaaat ctgatggacc tagaagtctg cttttgtacc tgctgggccc     1440

caaagttggg cattttctc tctgttccct ctctttgaa aatgtaaaat aaaaccaaaa       1500

atagacaact ttttcttcag ccattccagc atagagaaca aaaccttatg gaaacaggaa     1560

tgtcaattgt gtaatcattg ttctaattag gtaaatagaa gtccttatgt atgtgttaca     1620

agaatttccc ccacaacatc ctttatgact gaagttcaat gacagtttgt gtttggtggt     1680

aaaggatttt ctccatggcc tgaattaaga ccattagaaa gcaccaggcc gtgggagcag     1740

tgaccatctg ctgactgttc ttgtggatct tgtgtccagg gacatggggt gacatgcctc     1800

gtatgtgtta gagggtggaa tggatgtgtt tggcgctgca tgggatctgg tgccctctt     1860

ctcctggatt cacatccccca cccagggccc gcttttacta agtgttctgc cctagattgg     1920

ttcaaggagg tcatccaact gactttatcg agtggaattg ggatatattt gatatacttc     1980

tgcctaacaa catggaaaag ggttttcttt tccctgcaag ctacatccta ctgctttgaa     2040

cttccaagta tgtctagtca ccttttaaaa tgtaaacatt ttcagaaaaa tgaggattgc     2100

cttccttgta tgcgcttttt accttgacta cctgaattgc aagggatttt tatatattca     2160

tatgttacaa agtcagcaac tctcctgttg gttcattatt gaatgtgctg taaattaagt     2220

tgtttgcaat taaaacaagg tttgcccaca aaaaaaaaaa aaaa                       2264
```

<210>   7
<211>   370
<212>   PRT
<213>   Homo sapiens

<400>   7

Met Glu Leu His Glu Arg Pro Asp Glu Arg Arg Lys Ala Arg Thr Ser
1   5   10   15

```
Thr Gln Gly Arg Leu Gly Asp Trp Arg Arg Val His Ala Asp Gly Phe
        20              25              30

Thr His Arg Val Leu Gly Ala Pro Ala Ala Trp Ser Ser Ser Ser
        35              40              45

Trp Leu Glu Pro Ala Met Thr Ser Arg Thr Arg Val Thr Trp Pro Ser
        50              55              60

Pro Pro Arg Pro Leu Pro Val Pro Ala Ala Ala Ala Val Ala Phe Gly
65              70              75              80

Ala Lys Gly Thr Asp Pro Ala Glu Ala Arg Ser Ser Arg Gly Ile Glu
            85              90              95

Glu Ala Gly Pro Arg Ala His Gly Arg Ala Gly Arg Glu Pro Glu Arg
            100             105             110

Arg Arg Ser Arg Gln Gln Arg Arg Gly Gly Leu Gln Ala Arg Arg Ser
        115             120             125

Thr Leu Leu Lys Thr Cys Ala Arg Ala Arg Ala Thr Ala Pro Gly Ala
    130             135             140

Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys
145             150             155             160

Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr
            165             170             175

Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala
            180             185             190

Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe
        195             200             205

Glu Phe Met Asp Asp Ala Asn Met Cys Ile Ala Ile Ala Ile Ser Leu
    210             215             220

Leu Met Ile Leu Ile Cys Ala Met Ala Thr Tyr Gly Ala Tyr Lys Gln
225             230             235             240
```

Arg Ala Ala Trp Ile Ile Pro Phe Phe Cys Tyr Gln Ile Phe Asp Phe
            245   250   255

Ala Leu Asn Met Leu Val Ala Ile Thr Val Leu Ile Tyr Pro Asn Ser
            260   265   270

Ile Gln Glu Tyr Ile Arg Gln Leu Pro Pro Asn Phe Pro Tyr Arg Asp
        275   280   285

Asp Val Met Ser Val Asn Pro Thr Cys Leu Val Leu Ile Ile Leu Leu
    290   295   300

Phe Ile Ser Ile Ile Leu Thr Phe Lys Gly Tyr Leu Ile Ser Cys Val
305   310   315   320

Trp Asn Cys Tyr Arg Tyr Ile Asn Gly Arg Asn Ser Ser Asp Val Leu
            325   330   335

Val Tyr Val Thr Ser Asn Asp Thr Thr Val Leu Leu Pro Pro Tyr Asp
            340   345   350

Asp Ala Thr Val Asn Gly Ala Ala Lys Glu Pro Pro Pro Pro Tyr Val
        355   360   365

Ser Ala
    370

<210>   8
<211>   1341
<212>   DNA
<213>   Homo sapiens

<400>   8
gctccaggtg gaagagtgtg cagctgcaag atttaataga gtgaaaacag ctcccataca   60

gtgggcgggg acccaaaggg ggttgcccac tcccggctgg aatgcctggg gtttatatcc   120

caatcattgt ccctccccct gtgctctcag atgatagatg atttgactat ttctttacct   180

cttgctttta gcttaattgg tgttttagtg agcccttttt actacctgat tggtcaggtg   240

tgagctgagt tacaagcccc atgttta